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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,317	09/08/2005	Alexander Gorban	22193-00009-US1	1461
42441 7590 09/24/2007 CONNOLLY BOVE LODGE & HUTZ LLP (FOR CABINET BEAU DE LOMENIE) P.O. BOX 2207 WILMINGTON, DE 19899-2207			EXAMINER DAVIS, MARY ALICE	
			ART UNIT 3748	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/521,317

Applicant(s)

GORBAN, ALEXANDER

Examiner

Mary A. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: the species of Figures 1-2 and 7-14, the species of Figures 3-6 and 15-19, and the species of Figure 20.

If the species of Figures 1-2 and 7-14 is chosen, please choose one of the sub-species as follows: the sub-species of Figure 1, the sub-species of Figure 7, the sub-species of Figure 9, the sub-species of Figure 11, and the sub-species of Figure 13.

If the species of Figures 3-6 and 15-19 is chosen, please choose one of the sub-species as follows: the sub-species of Figure 3, the sub-species of Figure 5, the sub-species of Figure 15, the sub-species of Figure 17, and the sub-species of Figure 19.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner (please review for completeness and accuracy):

The species/sub-species of Figures 1-2 correspond to claims: 1-2, 4, 8-9, 15, and 17.

The species/sub-species of Figures 3-4 correspond to claims: 1-2, 4, and 16-17.

The species/sub-species of Figures 5-6: 1-2, 4, and 16-17.

The species/sub-species of Figures 7-8 correspond to claims: 1-2, 4, 8-9, 15, and 17-18.

The species/sub-species of Figures 9-10 correspond to claims: 1-4, 15, and 17.

The species/sub-species of Figures 11-12 correspond to claims: 1-2, 4-7, 15, and 17.

The species/sub-species of Figures 13-14 correspond to claims: 2, 4-6, 10, 15, and 17 (these claims need to be re-written in the independent form, due to the contradiction with claim limitations found in claim 1 (see discussion below)).

The species/sub-species of Figures 15-16 correspond to claims: 1-4 and 16-17.

The species/sub-species of Figures 17-18 correspond to claims: 1-2, 4, 11, and 16-17.

The species/sub-species of Figure 19 correspond to claims: 1-2, 4, 12, and 16-17.

The species of Figure 20 correspond to claims: 4 and 13-17 (these claims disclose multiple male and female members, however, the specification and drawings do not disclose the method of synchronizing the members together. Claims 13-14 should be re-written into an independent form, due to the synchronization mechanism for multiple members is not disclosed, which is part of the independent limitation of claim 1.)

The following claim(s) are generic: currently no claims appear to be generic. There are two independent claims: claim 1 and claim 18. Claim 1 recites a limitation to "a crank like mechanism" (lines 16-17). The planetary gears of Figures 13-14 does not have a "crank like mechanism", therefore, claim 1 is not generic. Claim 18 discloses "two degrees of freedom" (part b), which in the specification only Figures 7-8 disclose two degrees of freedom.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the species of Figures 1-2 and 7-14 comprise of a screw machine with female rotor having one less order of symmetry from the male rotor, the species of Figures 3-6 and 15-19 comprises of a screw machine with a female rotor having one more order of symmetry from the male rotor, and the species of Figure 20 comprises of multiple co-axial male and female members. The sub-species of Figures 1-2 and 7-14 lack the same or corresponding special technical features for the following reasons: the sub-species of Figure 7, the sub-species of Figure 9, the sub-species of Figure 11, and the sub-species of Figure 13 use different mechanisms to synchronize the male and female members together. The sub-species of Figures 3-6 and 15-19 lack the same or corresponding special technical features for

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the following reasons: the sub-species of Figure 3, the sub-species of Figure 5, the sub-species of Figure 15, the sub-species of Figure 17, and the sub-species of claim 19 use different mechanisms to synchronize the male and female members together.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.**

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the

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requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary A. Davis whose telephone number is (571) 272-9965. The examiner can normally be reached on Monday thru Friday; (Second Friday off) 7am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAD

9/19/07



/Mary A. Davis/

Patent Examiner Art Unit: 3748



THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700